

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

This SDS is used for the following Arcot products:

Arcot #9620 FC-20 Freezer Cleaner

Arcot #9621 FC-21 Freezer Cleaner

Manufacturer: Arcot Manufacturing Corporation, 2950 Mowery Road, Houston, Texas, U.S.A. 77045

Emergency Response Telephone: 1-800-633-8253 (Account #9390)

Arcot Customer Service Telephone: 713-413-9700

Website: www.ArcotManufacturing.com

Recommended Use: For industrial and commercial use only.

Restrictions On Use: Read label and SDS carefully before use.

2. HAZARDS IDENTIFICATION

Physical hazards Not classified.

Health hazards

Acute toxicity, oral

Category 4

Skin irritation

Category 2

Eye damage/irritation

Category 2B

Specific target organ toxicity, single exposure

Category 1 (Central Nervous System, Kidney)

Specific target organ toxicity, repeated exposure

Category 1 (Central Nervous System, Kidney)

Environmental hazards Not classified.

OSHA defined hazards

Combustible dust

Not applicable

Pyrophoric gas

Not applicable

Simple asphyxiant

Not applicable

Label elements



Signal Word: **DANGER**

Hazard Statement: Harmful if swallowed. Causes skin irritation. Causes eye irritation. Causes damage to organs (if swallowed) through prolonged or repeated exposure.

Precautionary statement:

Prevention: Do not breathe fume, gas, mist, vapor or spray. Wear protective gloves and eye protection or face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth.

IF ON SKIN (or hair): Wash skin with plenty of water. Take off immediately all contaminated clothing and wash it before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.

Get medical attention if you feel unwell.

Storage: Store away from incompatible materials. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in accordance with local, regional, national and international regulations.

Disposal: Dispose of contents and container to an approved waste disposal plant in accordance with applicable local, state, federal and international regulations.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical name	Common name and synonyms	CAS number	%
Ingredients are considered trade secrets. However, all hazardous aspects of the ingredients and of this mixture are considered and included. The exact percentage of composition has been withheld as a trade secret. This SDS is used for a group of substantially similar mixtures.			

4. FIRST-AID MEASURES

Inhalation: Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact: Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion: Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if you feel unwell.

Most important symptoms/effects, acute and delayed: Abdominal pain. Convulsions. Dizziness. Nausea, vomiting. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information: If you feel unwell, seek medical advice. Show the label and this SDS where possible. Ensure that medical personnel take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Powder. Alcohol resistant foam. Carbon dioxide (CO₂).

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Firefighting equipment/instructions: Move containers from fire area if you can do so without risk.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards: No unusual fire or explosion hazards noted.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill or leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up: This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

7. HANDLING AND STORAGE

Precautions for safe handling: Do not breathe mist or vapor. Avoid contact with eyes. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

U.S. ACGIH Threshold Limit Values			
Product	Type	Value	Form
	Ceiling	200 mg/m ³	Aerosol

Biological limit values: No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. It is recommended that users of this product perform a risk assessment to determine the appropriate PPE.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Chemical respirator with organic vapor cartridge and full face-piece.

Skin protection:

Hand protection: Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other: Wear suitable protective clothing. Use of an impervious apron is recommended.

Respiratory protection: Chemical respirator with organic vapor cartridge and full face-piece.

Thermal hazards: Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations: Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear.
Physical state	Liquid.
Form	Liquid.
Color	9620 is Brown or Amber. 9621 is Green or Amber.
Odor	Odorless.
Odor threshold	Not available.
pH	6.5
Melting point/freezing point	In concentrated form: 9620 is approximately -30°F. 9621 is +10°F.
Initial boiling point and boiling range	Not available.
Flash point	> 212°F (> 100°C)

Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits:	
Flammability limit –	
Lower (%)	Not available.
Flammability limit –	
Upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	approximately 1.0-1.1
Solubility (water)	Soluble.
Partition coefficient	
(n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Kinematic viscosity	Not available.

10. STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Contact with incompatible materials.

Incompatible materials: Strong oxidizing agents. Oxidizing agents.

Hazardous decomposition products: Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Causes eye irritation.
Ingestion	Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics: Abdominal pain. Convulsions. Dizziness. Nausea, vomiting. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

Information on toxicological effects:

Acute toxicity	Harmful if swallowed.
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Components	Species	Test Results
Acute		
Dermal LD 50	Rabbit	9530 mg/kg
Oral LD50	Cat	1650 mg/kg
	Dog	5500 mg/kg
	Guinea pig	8.2 g/kg
	Mouse	14.6 g/kg
	Rat	5.89 g/kg

Estimates may be based on additional component data not shown.

Skin corrosion/irritation: Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation: Causes eye irritation.

Respiratory or skin sensitization:

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization

This product is not expected to cause skin sensitization.

Germ cell mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

Reproductive toxicity: This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure: Causes damage to organs.

Specific target organ toxicity - repeated exposure: Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard: Not an aspiration hazard.

Chronic effects: Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.

12. ECOLOGICAL INFORMATION

Ecotoxicity: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Aquatic		
Fish LC50	Fish	34994.4453 mg/l, 96 hours estimated
Fish LC50	Fathead minnow (Pimephales promelas)	8050 mg/l, 96 hours

* Estimates may be based on additional component data not shown.

Persistence and degradability: No data is available on the degradability of this product.

Bio-accumulative potential: No data available.

Mobility in soil: No data available.

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local, regional, national and international regulations.

Local disposal regulations: Dispose in accordance with all applicable regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues/unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

DOT (U.S. Department of Transportation): Not regulated by DOT.
Reportable Quantity: 5000 lbs.

IATA: Not regulated as dangerous goods.

IMDG: Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not established.

15. REGULATORY INFORMATION

U.S. federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4): One of the ingredients is listed.

SARA 304 Emergency release notification: Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes
	Delayed Hazard - Yes
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

SARA 302 Extremely hazardous substance: Not listed.

SARA 311/312 Hazardous chemical: Yes

SARA 313 (TRI reporting): One of the ingredients is listed.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: One of the ingredients is listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Not regulated.

Safe Drinking Water Act (SDWA) - Not regulated.

U.S. California Controlled Substances - CA Department of Justice

(California Health and Safety Code Section 11100): Not listed.

U.S. California Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. OTHER INFORMATION

HMIS® ratings Health: 2 * Flammability: 1 Physical hazard: 0

NFPA ratings Health: 2 Flammability: 1 Instability: 0

HMIS & NFPA ratings involve data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered.

Key or legend to abbreviations and acronyms used in the safety data sheet:

ACGIH	American Conference of Government Industrial Hygienists
DSL	Canada, Domestic Substances List
NDSL	Canada, Non-Domestic Substances List
CNS	Central Nervous System
CAS	Chemical Abstract Service
EC50	Effective Concentration
EC50	Effective Concentration 50%
EGEST	EOSCA Generic Exposure Scenario Tool
GHS	Globally Harmonized System
>=	Greater Than or Equal To
IC50	Inhibition Concentration 50%
IARC	International Agency for Research on Cancer
<=	Less Than or Equal To
LC50	Lethal Concentration 50%
LD50	Lethal Dose 50%
LOAEL	Lowest Observed Adverse Effect Level
NFPA	National Fire Protection Agency
NIOSH	National Institute for Occupational Safety & Health
NTP	National Toxicology Program
NZIoC	New Zealand Inventory of Chemicals

NOAEL	No Observable Adverse Effect Level
NOEC	No Observed Effect Concentration
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limit
PRNT	Presumed Not Toxic
RCRA	Resource Conservation Recovery Act
STEL	Short-term Exposure Limit
SARA	Superfund Amendments and Reauthorization Act.
TLV	Threshold Limit Value
TWA	Time Weighted Average
TSCA	Toxic Substance Control Act
UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
WHMIS	Workplace Hazardous Materials Information System

DISCLAIMER: The information contained herein is based upon data obtained from sources believed to be reliable and reflects our best professional judgment. Since it is impossible to anticipate all of the conditions under which our products may be used, we do not guarantee that the recommendations will be adequate for all individuals and situations. Each user of this product should determine the suitability of the product for his or her particular purpose and should comply with all federal, state and local regulations. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. We shall not be held liable for any damage resulting from handling or from contact with the above product or from improper use of our products. We do not provide any warranties, expressed or implied, and do not assume any responsibility for the accuracy or completeness of the data contained herein. This information is offered for your information, consideration, and investigation. You should satisfy yourself that you have all current data relevant to your particular use. We update SDS and labels on a regular basis. Please do not hesitate to contact us for current information.

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